

=> b reg  
FILE 'REGISTRY' ENTERED AT 14:46:53 ON 17 NOV 2008  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2008 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file  
provided by InfoChem.

STRUCTURE FILE UPDATES: 16 NOV 2008 HIGHEST RN 1072892-84-2  
DICTIONARY FILE UPDATES: 16 NOV 2008 HIGHEST RN 1072892-84-2

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH July 5, 2008.

Please note that search-term pricing does apply when  
conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and  
predicted properties as well as tags indicating availability of  
experimental property data in the original document. For information  
on property searching in REGISTRY, refer to:

<http://www.cas.org/support/stngen/stndoc/properties.html>

=> d que sat 17  
L5 STR  
NODE ATTRIBUTES:  
DEFAULT MLEVEL IS ATOM  
DEFAULT ECLEVEL IS LIMITED

GRAPH ATTRIBUTES:  
RING(S) ARE ISOLATED OR EMBEDDED  
NUMBER OF NODES IS 21

STEREO ATTRIBUTES: NONE  
L7 6 SEA FILE=REGISTRY SSS FUL L5

=> b hcap  
FILE 'HCAPLUS' ENTERED AT 14:47:04 ON 17 NOV 2008  
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.  
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.  
COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is  
held by the publishers listed in the PUBLISHER (PB) field (available  
for records published or updated in Chemical Abstracts after December  
26, 1996), unless otherwise indicated in the original publications.  
The CA Lexicon is the copyrighted intellectual property of the  
the American Chemical Society and is provided to assist you in searching  
databases on STN. Any dissemination, distribution, copying, or storing  
of this information, without the prior written consent of CAS, is  
strictly prohibited.

FILE COVERS 1907 - 17 Nov 2008 VOL 149 ISS 21  
FILE LAST UPDATED: 16 Nov 2008 (20081116/ED)

HCAplus now includes complete International Patent Classification (IPC)  
reclassification data for the third quarter of 2008.

New CAS Information Use Policies, enter HELP USAGETERMS for details.

This file contains CAS Registry Numbers for easy and accurate  
substance identification.

=> d bib abs hitrn fhitstr l12 tot

L12 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2008 ACS on STN

AN 2004:182730 HCAPLUS

DN 140:235912

TI Preparation of polyamine conjugates with acidic retinoids and their

therapeutic applications

IN Papageorgiou, Dionyssios; Dreinas, Dionyssios; Tsambeas, Dionyssios

PA Greece

SO PCT Int. Appl., 45 pp.

COUN: PIXXD2

DP Patent

LA English

FAN.CNT 1

PATENT NO. KIND DATE APPLICATION NO. DATE

PI WO--2004018001 A1 200401304 2003W0-GR0000045 20030822  
 WI AF, AG, AL, AM, AT, AU, AZ, BA, BG, BR, BY, BZ, CA, CH, CN,  
 CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH,  
 GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, LZ, LK, LR,  
 LS, LT, LU, LV, MA, MD, MG, MK, MN, MM, MX, MZ, NO, NZ, OM, PH,  
 PL, PT, RO, RS, SD, SE, SG, SI, SK, SL, TJ, TM, TN, TR, TT, TZ,  
 UA, UG, VE, VN, ZA, ZW  
 RW: GH, GM, KE, LS, MM, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY,  
 KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CZ, DE, DK, EE, ES,  
 FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF,  
 CI, CM, GA, GG, GW, ML, SN, TG  
 AU--2002324242 A1 200401304 2002AU-000424242 20020822  
 EP----1569694 A1 20050907 2002EP-000758661 20020822  
 R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT,  
 IE, SI, LT, LV, FI, RO, MR, CY, AL, IR, BG, CZ, EE, SK

US--20060189696 A1 20060824 2005US-000549905 20050920

PPIA 2003W0-GR000045

OS MARPAT 140:235912

GI

L12 ANSWER 1 OF 1 HCAPLUS COPYRIGHT 2008 ACS on STN (Continued)  
 RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(Prepn. of polyamine conjugates with acidic retinoids and their therapeutic use as RNase inhibitors and anti-inflammatory agents)

IT 666854-57-5B  
 RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)

(Preparation of polyamine conjugates with acidic retinoids and their therapeutic use as RNase inhibitors and anti-inflammatory agents)

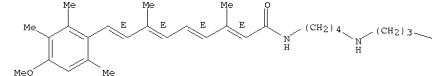
IT 666854-51-9B  
 RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(Preparation of polyamine conjugates with acidic retinoids and their therapeutic use as RNase inhibitors and anti-inflammatory agents)

RN 666854-51-9 HCAPLUS  
 CN 2,4,6,8-Nonatetraenamide, N-(4-[(3-aminopropyl)amino]butyl)-9-(4-methoxy-2,3,6-trimethylphenyl)-3,7-dimethyl-, (2E,4E,6E,8E)- (CA INDEX NAME)

Double bond geometry as shown.

PAGE 1-A



PAGE 1-B

^NH2

RE.CNT 5 THERE ARE 5 CITED REFERENCES AVAILABLE FOR THIS RECORD  
 ALL CITATIONS AVAILABLE IN THE RE FORMAT

AB The present invention discloses preparation of novel polyamine conjugates with acidic retinoids, such as I ( $R_1 = H, Ra$ ;  $R_2 = H, Ra$ ), for their therapeutic use as RNase P inhibitors and anti-inflammatory agents. I have been generally obtained using an key-step of condensation of linear, conformationally restricted, acidic anchored polyamine and suitably protected derivs. with vitamin A derivs. These compds. inhibit the ribozyme RNase P (RNase P) and the production of interleukin-2 (IL-2) and interferon- $\gamma$  (INF- $\gamma$ ) by peripheral blood mononuclear cells in vitro. This retinoid analog [ $R_1 = Ra$ ,  $R_2 = H$  (II)] was prepared via multistep synthesis sequence starting from  $\alpha$ -[R]-retinoic acid (RA)  $CCOC(=O)H_2$  and all-trans-retinoic acid. II was tested for D. discoideum RNase P activity ( $K_1 = 1.1 \mu M$ ).

IT 666854-51-9P

RL: PAC (Pharmacological activity); SPN (Synthetic preparation); THU (Therapeutic use); BIOL (Biological study); PREP (Preparation); USES (Uses)

(Preparation of polyamine conjugates with acidic retinoids and their therapeutic use as RNase inhibitors and anti-inflammatory agents)

IT 666854-44-0 666854-45-1

=> b uspatall  
FILE 'USPATFULL' ENTERED AT 14:47:18 ON 17 NOV 2008  
CA INDEXING COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPATOLD' ENTERED AT 14:47:18 ON 17 NOV 2008  
CA INDEXING COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

FILE 'USPAT2' ENTERED AT 14:47:18 ON 17 NOV 2008  
CA INDEXING COPYRIGHT (C) 2008 AMERICAN CHEMICAL SOCIETY (ACS)

=> d bib abs hitrn fhitstr 114 tot

L14 ANSWER 1 OF 1 USPATFULL on SIN  
 AN 2006:22410 USPATFULL  
 II Polyaniline conjugates with acidic retinoids and preparation thereof  
 IN Polyacanoan, Dionysios, DEPARTMENT OF CHEMISTRY, UNIVERSITY OF PATRAS,  
 DATES: 20060101  
 Draina, Dionysios, Patras, GREECE  
 Tsambas, Dionysios, Rio Patras, GREECE  
 PI US-20060189696 A1 20060824  
 AI 2002US-000549905 A1 20020822 (10)  
 2002WO-GR0000045 20020822  
 20050920 PCT 371 date

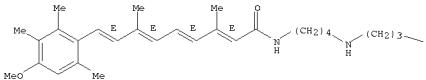
DT Utility  
 FS APPLICATION  
 LREP George B Georgelis, Pkm 143, 152 Congressional Lane, Rockville, MD,  
 20852, US

CLMN Number of Claims: 11  
 ECL Exemplary Claim: 1  
 DRWN 12 Drawing Page(s)  
 LN.CNT 832  
 CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
 AB Invented are novel polyaniline conjugates which have been readily obtained using as key-step the condensation of linear, conformationally restricted, cyclic and branched polyamides or suitably protected derivatives with vitamin A derivatives. These compounds inhibit the ribozyme ribonuclease P (RNase P) and the production of interleukin-2 (IL-2) and interferon- $\gamma$  (INF- $\gamma$ ) by peripheral blood mononuclear cells in vitro.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.  
 IT 666854-5-9  
 (preparation of polyaniline conjugates with acidic retinoids and their therapeutic use as RNase inhibitors and anti-inflammatory agents)  
 IT 666854-44-0 666854-45-1  
 (preparation of polyaniline conjugates with acidic retinoids and their therapeutic use as RNase inhibitors and anti-inflammatory agents)  
 IT 666854-59-9  
 (preparation of polyaniline conjugates with acidic retinoids and their therapeutic use as RNase inhibitors and anti-inflammatory agents)  
 IT 666854-51-9P  
 (preparation of polyaniline conjugates with acidic retinoids and their therapeutic use as RNase inhibitors and anti-inflammatory agents)  
 RN 666854-51-9 USPATFULL  
 CN 2,4,6,8-Nonatetraenamide, N-[4-(3-aminopropyl)amino]butyl-9-(4-methoxy-2,3,6-trimethylphenyl)-3,7-dimethyl-, (2E,4E,6E,8E)- (CA INDEX NAME)

Double bond geometry as shown.

PAGE 1-A



PAGE 1-B

$\sim$ NH<sub>2</sub>

=> d his

FILE 'HCAPLUS' ENTERED AT 14:40:29 ON 17 NOV 2008  
L1 1 US20060189696 /PN

FILE 'REGISTRY' ENTERED AT 14:40:41 ON 17 NOV 2008

FILE 'HCAPLUS' ENTERED AT 14:40:42 ON 17 NOV 2008  
L2 TRA L1 1- RN : 39 TERMS

FILE 'REGISTRY' ENTERED AT 14:40:42 ON 17 NOV 2008  
L3 39 SEA L2  
L4 14 L3 AND 46.150.18/RID  
L5 STR  
L6 1 L5  
L7 6 L5 FULL  
L8 4 L7 AND L3  
L9 2 L7 NOT L8

FILE 'HCAOLD' ENTERED AT 14:45:37 ON 17 NOV 2008  
L10 0 L8  
L11 0 L9

FILE 'HCAPLUS' ENTERED AT 14:45:43 ON 17 NOV 2008  
L12 1 L8  
L13 0 L9

FILE 'USPATFULL, USPATOLD, USPAT2' ENTERED AT 14:45:59 ON 17 NOV 2008  
L14 1 L8  
L15 0 L9